

Abstract

- 5 The present invention relates to universal lossless data compression and
decompression methods, as well as to apparatus for their implementation. The
method is based on predicting the characters of data stream being processed by
comparing them with predictors in one or several predictor tables and counting
consecutively predicted characters, thus reducing considerably the number of output
10 operations. Addressing in predictor tables is performed by means of one or several
hash strings, each of which being formed by means of an unique hash function
correlative with the input data. Processing the data stream in such a way allows
eliminating the compression rate limitation that depends on the taken character length,
thus increasing the compression rate and, at the same time, decreasing data
15 processing time sufficiently.

FIG. 2